

2.3

Practice C

For use with pages 78–83

1. Which expression is equivalent to
- $-24 - (x + 9) + 4x - (12 - 2x)$
- ?

A. $-45 - x$ B. $-45 + 5x$ C. $-27 - x$ D. $-3 + 5x$

For the given expression, identify the terms, like terms, coefficients, and constant terms. Then simplify the expression.

2. $3u - 12 - 4u + 28 - 10u$

3. $6\ell + 32 - 4\ell - 19 - 13\ell$

4. $-10v - 26 - 17v + 21 - 9v$

5. $-z + 24 + 6z - 31 - 15z$

6. $-30 + 14 - 11h + 8h - 1$

7. $27 + 6j - 16 - 18j + 20$

Simplify the expression.

8. $5(3a - 1) - 6a + 12$

9. $-3(10 - 2p) + 11p - 13$

10. $21 - 6(14 - 3i) - 28i$

11. $30 - 7(m + 5) + 16m$

12. $31 + 4w^2 - 8(10 - 2w^2)$

13. $-26 - 11x + 15(20x - 4)$

14. $24(2 + n) - 3(4n + 6)$

15. $-18(3b - 1) - 9(11 - 4b)$

16. $34 - 9k^2 - 6(k^2 + 12) - 17k^2$

17. $39 - 14r^2 + 7(21 - 5r^2) + 30r^2$

18. $-10t^2 + 37 - (25t - 8t^2 + 13) + 4t$

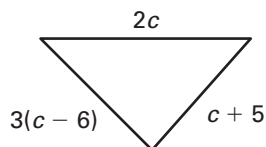
19. $-22d^2 - 42d - (35d + 12d^2 + 17) - 31$

20. An interior decorator wants to complete a sunroom with three types of plants: Kentia Palm plants, Schefflera plants, and Areca Palm plants. Each Kentia Palm plant costs \$45, each Schefflera plant costs \$35, and each Areca Palm plant costs \$40. The decorator plans to buy 10 plants.

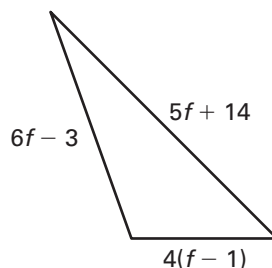
- a. Let k be the number of Kentia Palm plants and s be the number of Schefflera plants the decorator buys. In terms of k and s , how many Areca Palm plants does the decorator buy?
- b. Write and simplify an expression in terms of k and s for the total cost of the plants.
- c. Of the 10 plants the decorator buys, 2 are Kentia Palm plants and 5 are Schefflera plants. Use your expression from part (b) to find the total cost.

Write and simplify an expression for the perimeter of the triangle or rectangle.

21.



22.



23.

